



NOT FOR PUBLICATION

INTERMOUNTAIN FOREST AND RANGE EXPERIMENT STATION

FOREST SERVICE, U. S. DEPARTMENT OF AGRICULTURE

Ogden, Utah

Reed W. Bailey, Director

Action	Initial
Moncrief	<i>RM</i>
Payne	<i>RM</i>
Quinn	<i>RM</i>
Reed	<i>RM</i>
W. E. Cole	<i>RM</i>
W. E. Mineau	<i>RM</i>
Payne	<i>RM</i>
Payne	<i>RM</i>
Payne	<i>RM</i>

*Copies sent to
supervisor and
rangers 12/30/57*

Sawtooth National Forest
Annual Aerial Survey
September 1957

By

W. E. Cole - W. E. Mineau
Entomologists

Prepared by

Division of Forest Insect Research

Boise Research Center
Boise, Idaho

FILE COPY

*Control
Insect
✓ Sawtooth*

SAWTOOTH NATIONAL FOREST
ANNUAL AERIAL SURVEY

September 1957

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Entomologists

INTRODUCTION

The annual aerial survey of the Sawtooth National Forest was conducted between September 25 and 26, 1957. Flights were made in the same manner as in the past to cover all forested areas by drainages. Where aerial observations indicated abnormal conditions further checks were made on the ground wherever possible. The purpose of the examination was to detect, locate, and evaluate the evidence of unusual forest insect activity.

The spruce budworm, as in the past few years, remains the most prominent insect. The budworm infestation, along the South Fork of the Boise River, was first reported in 1949. Since that time the severity of defoliation has fluctuated annually and the extent of damage has increased to some degree. The 1956 aeriels revealed approximately 76,000 acres of light to heavy defoliation.

Bark beetle damage remains at an endemic level. Little annual drain has resulted from the Douglas-fir beetle and fir engraver beetles. Maintenance control of the mountain pine beetle in lodgepole pine has been done on a small scale for the past few years.

Observations and reports by the Sawtooth Forest personnel have greatly aided the detection survey.

RESULTS

A description of each area of infestation follows and the areas keyed on the attached map.

Area A. This area includes Stanley Basin, its drainages, and south to Galena Summit.

^{1/} Forestry Aid-Research

In general area A is relatively free of budworm. However, infestations of an unknown defoliator of alpine fir were found near the headwaters of a few drainages on the west side of the basin. Approximately 4,900 acres of alpine fir have been defoliated in this area.

The only barkbeetle damage observed was that by fir engravers in alpine fir. This is an endemic situation and the damage occurs primarily on individual trees scattered throughout the area.

Area B. Warm Springs Creek and its tributaries from Carrietown to Ketchum, Idaho comprise area B.

Several endemic situations of alpine fir engravers were located throughout the area. Again, this appears to be a static infestation and of no serious consequence.

A very light infestation of spruce budworm was spotted on 5,300 acres along Carrie Creek, King-of-the-West Creek and Blackhorse Creek.

Area C. This area is composed of the South Fork of the Boise River and its tributaries.

The spruce budworm remains active in this area again this year. The infestation runs from light defoliation on the ridges to heavy defoliation within the creek bottoms and covers approximately 72,000 acres. The ground survey revealed an above average of parasitism in Bounds Creek and the research study plot in Boardman Creek showed a medium defoliation and larval population.

An alpine fir defoliator has been prevalent throughout the higher elevations and particularly at the headwaters of Vienna, Emma, Johnson, and Ross Creeks, or approximately 4,700 acres.

Losses due to the barkbeetles are at an endemic level.

SUMMARY

The budworm remains active, but static, on the Sawtooth National Forest. The boundaries of the infestations have changed slightly; expanding in some areas, reducing in others. The reduction is due namely to more accurate mapping. Two new areas of light to medium infestations were recorded this year. However, parasitism of the budworm population appears to have increased slightly in 1957.

Bark beetle losses remain at an endemic level.

Table 1. Acreage and degree of severity of insect damage on the
Sawtooth National Forest

Area	Defoliator	Acreage of defoliation			Total
		Light	Medium	Heavy	
A	Unknown defoliator-A.F.	1,600	3,300	--	4,900
B	Budworm	5,300	--	--	5,300
C	Unknown defoliator-A.F.	--	4,700	--	4,700
	Budworm	24,000	70,000	--	94,000
	Total budworm	29,300	70,000	--	99,300
	Total unknown	1,600	8,000	--	9,600

APPENDED NOTE

Area C. A late ground survey revealed that this infestation has extended north of the South Fork between Cayuse Creek and Skeleton Creek covering approximately 22,000 acres. Thus the total acreage for the forest should be approximately 94,000.

The damage ranges from a light to heavy degree of defoliation and appears spotty in Big Water Gulch. Damage that occurred last year appears extremely light on all these drainages.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

SAWTOOTH NATIONAL FOREST

NORTH DIVISION

IDAHO

BOISE MERIDIAN

1955*

SCALE
0 1 2 3 4

LEGEND

BUDWORM INFESTED AREAS

- (M) LIGHT
- (M) MEDIUM
- (H) HEAVY

UNKNOWN DEFOLIATOR ON ALPINE FIR

(+)

FIR ENGRAVER

COMPILED AT REGIONAL OFFICE, OGDEN, 1951,
FROM U.S.D.A. FOREST SERVICE
OTHER SURVEYS BY M. W. BIRD AND H. M. SHAW
TRADED BY M. W. BIRD, 1951
REVISED BY C. SPAIN, 1952

REPRINT OF 1942 EDITION WITH
BOUNDARY CHANGES TO MARCH 1,
1955

POLYCONIC PROJECTION
NORTH AMERICAN DATUM